Incorporating Medical Student Teaching in the Pediatric Clerkship to Increase Subject Proficiency

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Collaborative Team Members

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• We have identified a need to increase NBME subject examination scores to strengthen medical students’ understanding of pediatric medicine and improve their readiness for the USMLE Step 2CK exam.

• We aim to improve aggregate shelf scores measured by cohort by implementing evidence-based peer-teaching interventions into the M3 pediatrics clerkship.
- A booklet containing 50 topics was distributed to 3rd-year medical students (Class of 2023) during the pediatric clerkship orientation for cohorts 4-6.
- At the end of the 8-week clerkship, students completed an anonymous paper survey on their participation in presentations and preparedness for their shelf exam.
- The Office of Data Analysis and Strategy (ODAS) provided the average NBME scores and corresponding percentile per cohort.
- The average NBME scores from previous cohorts were also collected to establish a baseline shelf exam performance.
- No individually identifiable data was collected.
Results

<table>
<thead>
<tr>
<th>Number of Scores</th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
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<tbody>
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<td></td>
<td>309</td>
<td>37</td>
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**Pediatric NMBE Shelf Examination Average Percentile by Cohort**

- Median = 49
- 6 week clerkships due to COVID-19 pandemic

**Use of Booklet per Cohort**

- No
- Yes

- Cohort 4
- Cohort 5
- Cohort 6
100% of students who did use the booklet completed 1-10 topics (out of 50)

Main reason for not using the booklet
- “Too time intensive” (3)
- “Not my learning style” (5)
- “Forgot”
- “Used other resources”

Qualitative Data
- “I like the idea of making student-led teaching a regular part of the clerkship and think the purple book idea can really help to formalize it. It was awkward to do for residents who had never really heard of the book except from us, and they seemed to feel limited by the topics in the book and would rather suggest their own topic. If residents and attendings were more involved and knowledgeable about it, it may get used a bit more.”

- “I recommend that residents receive an incentive (i.e. treats, awards) like they do on OB. Otherwise, the let it fall to the wayside.”

- “I like the idea of the purple book and think requiring us to complete 10-20 topics would be reasonable. Especially if we get signed off if we listen to another student’s presentation.”
Challenges Encountered

- During the first cohort to be given the booklets, use was very low
  - Optional participation
  - Residents unfamiliar with booklet

Actions:
- Recruited M3 to be a liaison
- Emailed residents informing them about the booklet
- Sent email reminders mid cohort
What were your greatest lessons when implementing your new educational activity/strategy?

- Patience
- First cohort had 4 participants on the survey with only 1 of them stating use of the booklet
- Take feedback
- Revise and evaluate
- Communication with the students and residents was key
Next Steps

- Updated booklet → Grouped topics and cut from 50 to 30
- Incorporation into the pediatrics curriculum during the 2022-2023 Academic year which started Monday, April 11
  - Structured time with the teaching resident during ECU Peds Outpatient clinic
- Hopefully, it continues to gain traction and students will continue to use it like it is used in the OBGYN clerkship
- Continue collecting average NBME scores, corresponding percentile per cohort, and survey data
- Update survey to reflect number of topics completed
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